

MINES AND MINING

NEVADA CON.'S MILL ADDITION

Report Says Fifth Unit Will Go on New Site and Use Murray Creek Water.

The new unit of the concentrator which was recommended by Pope Yeatman, the consulting engineer of the Nevada Consolidated, in his annual report, is to be built on the old smelter site at the point of the hill north of East Ely. This report was given out last night from the highest authority. It is not intended to make known the exact location of the new concentrator at this time, as there is considerable work of preparation to be done in connection with its erection.

Water Question Bothers.

The nearest water to the concentrator at McGill is that of the streams in the valley, but as that is 60 feet below the plant in elevation it would cost a considerable sum to pump the water that high up the hill but it is a question that has been considered with others that may be of vital importance some day, when the big plant will need more water than Duck Creek will supply it.

This cost of pumping could be saved if a concentrator were built at either of the places mentioned, as the water flows to both places by natural means. That this would be a considerable saving in the cost of operation there is no doubt, and it has always been a matter of dispute among engineers as to whether the present smelter site is the proper one for the operation of the concentrator. Another point of vital consideration in the cost of operation of mines and concentrators is the matter of haulage. At the present concentrator it is estimated that the haulage of ore will be shortened about fourteen miles, and this will mean a saving of something like 10 or 15 cents a ton or from \$10 to \$150 a day.

One of the advantages of the proposed site of the new concentrator would have over the present site of the big concentrator which are present to any mining man who has ever visited the concentrators at McGill. The limited capacity of the bins which are used for storing the ore at McGill, for instance, and the trouble which is created over the bins is a constant one, and makes it very inconvenient for the ore to be dumped. When one trainload of ore is being run on the tracks it takes considerable time to get the cars over the bins on the single track which is in place, and during this time considerable time is lost. It must be remembered that the smelter and concentrators at the present time are not being operated at their full capacity, and that this must be taken into consideration by the engineers when they are planning the construction and operation of the big plants in charge.

New Mill Site a Logical One. The mines can and probably will be made to produce at a rate greatly in excess of their present output, and the concentrator and smelter must be in a position to keep up with the output of the mines. When these things are taken into consideration it is readily understood that the officials in charge of the erection of the new concentrator must be in a position to treat all the ore that is sent to them and at the least cost.

The cost of operation at McGill is of the greatest importance and of most vital concern to the promoters, when it is considered that it treats an ore which seldom averages over 2 per cent, and that copper is not what could be termed a precious metal at the best. In view of all these facts the erection of the new concentrator at a point other than the present smelter site would enable the company to make a large reduction in the cost of operation, is certainly logical, and the intention of the company to erect a new plant at this point is a surprise to those who are in a position to know the details of the operations of the present unit.

The capacity of the new unit which has been recommended by Mr. Yeatman is the same as those in operation at McGill, and is expected to handle about 1,500 tons of ore a day. The cost of its construction, with the necessary grading and work of preparation on the proposed site, would be about \$1,000,000.

That those interested in the erection of the new unit of the concentrator would give no information to its probable location is understood. If the location were made known before the work of construction was actually started there would start a rush for land adjoining the site and would cause much inconvenience to the men who have the work in charge.

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GOLDFIELD CO. TO DO THINGS

With New Mill Down to Business Company's Output Will Exceed \$800,000 a Month.

Goldfield, Nov. 22.—The Goldfield Consolidated Mines company will commence handling ore to the new 100-stamp mill at Columbia mountain tomorrow, and will fill the battery bins, which have a capacity of 4,000 tons, with dump ore for the trial run. The big plant is almost completed and is expected to be ready for operation by Dec. 15, which is two weeks earlier than General Manager J. H. Macdonald had expected. The plant is now being run up and ready for uninterrupted work. The grade of the ore will then be raised to 40 per cent, and the figure it will be maintained for an indefinite period.

The combination mill will be kept in commission for the present, and the two plants will have a gross production of \$2.40 per day, or \$22,000 per month. The new mill is said by the company to be the most complete gold quartz mill in the world. Besides amalgamation and concentration, the cyanide process will be used and a new process for the treatment of concentrates, which has been discovered and perfected by the company's metallurgical staff, is being installed. By this process the concentrates are subjected to chemical baths which makes roasting unnecessary, and the entire contents of the quartz are reduced to bullion.

Coal Beds Lie Nearly Flat.

All of the beds in this field lie nearly flat and in what are commonly known as "blanket seams"; that is, if coal outcrops on one side of a hill it probably extends through and will be found on the other side of the hill at about the same level, so that the geologist who can read the natural signs, can trace a coal bed for miles, even though no coal is seen on the surface.

Many ranchers appear to think that so long as there is no coal in sight the land cannot be classed as coal land. This view is obviously incorrect, for even a twenty-foot coal bed may be completely hidden by a grassy slope, and yet be of great value to the owner. The fact that the coal beds in this field lie nearly flat, and that the geologist can read the natural signs, can trace a coal bed for miles, even though no coal is seen on the surface, is a fact to be determined by examining the geology of the surrounding area, or by drilling.

Factors in Classifying Coal Lands.

The classification and valuation of coal land depend on three factors—the distance from a railroad, the character of the coal, and the depth at which it lies below the surface or of distance from outcrop. The two general classes of coal land, according to the latter classification, are (a) coal land within a distance of a mile from a railroad, and (b) coal land more than a mile from a railroad. The terms of a scheme of classification and valuation approved by the secretary of the interior, April 15, 1908, the coal is divided into four groups, according to its character, ranging from anthracite to lignite, and the first group to lignite and low-grade sub-bituminous coal in the fourth group. All the coal in the Powder River field seems to be low-grade sub-bituminous, and the land is therefore given the minimum value fixed by law—\$20 per acre. Within fifteen miles of a railroad and \$10 per acre beyond that limit. The scheme further specifies that this classification as coal land applies only to land underlain by coal beds from their outcrops on the surface, and that the depth of the coal bed is not to be taken into account.

Area Examined and Classified.

The area thus far examined along the Burlington railroad east of Clearmont, includes township 33 north, ranges 76, 77 and 78 west; township 34 north, ranges 76, 77 and 78 west; township 35 north, ranges 76, 77 and 78 west; township 36 north, ranges 76, 77 and 78 west; township 37 north, ranges 76, 77 and 78 west; township 38 north, ranges 76, 77 and 78 west; township 39 north, ranges 76, 77 and 78 west; township 40 north, ranges 76, 77 and 78 west; township 41 north, ranges 76, 77 and 78 west; township 42 north, ranges 76, 77 and 78 west; township 43 north, ranges 76, 77 and 78 west; township 44 north, ranges 76, 77 and 78 west; township 45 north, ranges 76, 77 and 78 west; township 46 north, ranges 76, 77 and 78 west; township 47 north, ranges 76, 77 and 78 west; township 48 north, ranges 76, 77 and 78 west; township 49 north, ranges 76, 77 and 78 west; township 50 north, ranges 76, 77 and 78 west; township 51 north, ranges 76, 77 and 78 west; township 52 north, ranges 76, 77 and 78 west; 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